Next Generation Integration Scorecard
Tracking Functional Area

The Tracking Functional Area provides a means for tracking Issues. The Tracking Functional Area is part of a functional cluster that includes the Resourcing Functional Area, Ontology Functional Area, Workflow Functional Area, and Process Functional Area. Each of these areas defines a set of operations that define the overall work management system.

**Issue**

Issues are relationships between a customer and a Queue. The effective dates of the Issue represent the opening and closing of the Issue. An Issue defines some built-in states indicating if the Issue is resolved, waiting for a response, or blocked on another Issue. Additional states can be modeled within a system orchestrating the Process Functional Area or through the Workflow Functional Area.

Issues can be related to each other in various ways.

Also known as: Ticket, Work, Request, Jira

<table>
<thead>
<tr>
<th>Read Operations for Issues:</th>
<th>Score</th>
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<tbody>
<tr>
<td>Get Issues given unique Ids</td>
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<tr>
<td>Get all the Issues in a system or Catalog</td>
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<tr>
<td>Query (Search) Issues based on attribute-based query terms or keywords</td>
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<tr>
<td>Register for notifications Issues have been created, updated or deleted</td>
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<table>
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<tr>
<th>Write Operations for Issues:</th>
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<tr>
<td>Create, Update and Delete Issues</td>
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<tr>
<td>Add an alias Id to reference an existing Issue</td>
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<td>Close and Reopen Issues</td>
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<td>Organize Issues into Catalogs</td>
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Operations for retrieving one’s own *Issues*:

- Get open Issues where the authenticated Agent is the customer
- Get the list of open issues in progress for the Agent
- Get closed Issues where the authenticated Agent is the customer
- Get the list of issues opened since given date for the Agent
- Get all issues for the Agent

Operations for tracking *Issues* in a Queue:

- Get an Issue specified by its Id
- Get the list of all open issues in a given Queue
- Get the list of all open unassigned issues in a given Queue
- Get the list of open issues in a given Queue that has been idle since the given date.
- Get the list of open Issues in a given Queue assigned to the given resource
- Get the list of Issues by [[[topic]]] for a given Queue which may include issues of any child [[[topic]]]
- Get the list of closed Issues that were created during a given date range for a given Queue
- Get the list of all Issues that were in an open status on a given date for a given Queue
- Get the list of all Issues created since the given date for a given Queue

Operations for resourcing *Issues*:

- Get the list of resource assignable for a given Queue
- Get the list of candidate resources from the Queue available for a given Issue sorted from best suited
- Get the list of Issues assigned to a given Resource
- Get the list of Issues assigned to a given Resource in a given Queue
- Assign an Issue to a Resource. The resource must be a valid resource in the issue queue
- Unassign an Issue from a Resource

Operations for triaging and routing *Issues*:

- Move a given Issue to another given Queue
- Get the list of assignable topics for a given Queue.

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Assign a given topic (ontology Subject) to a given Issue

Close a given Issue

Operations for inspecting Issue relationships:

- Get any subtasks for a given Issue
- Get any duplicate linked Issues for a given Issue
- Get any branched issues off of a given Issue
- Get any blocking Issues of a given Issue
- Get any blocked Issues as a result of a given Issue

Operations for managing Issue relationships:

- Create a nested subtask Issue
- Add and remove duplicate links between Issues
- Branch an Issue
- Copy a LogEntry from the root Issue to be visible in a given branched Issue
- Remove a LogEntry from a given branch Issue.
- Add or remove blocking relationships between Issues

Minimally Supported Attributes of Issues:

- A unique and permanent identifier
- The name of the Issue
- A description of the Issue
- The type of the Issue: task, bug, feature, request, complaint
- The Queue associated with this Issue
- The customer associated with this Issue
- The topic of this Issue, managed vocabulary as can be expressed as an ontology Subject
- The master issue, if this Issue is a subtask of another issue
- Duplicate issues, if this Issue is a duplicate of other issues
- The branched issue, if this Issue is a branch of another issue
- The root issue, if this Issue is a branch of another issue
- The priority Type of this Issue
- The creator Resource of this issue

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<table>
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<tr>
<th>Feature</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>The authenticated Agent that created this Issue</td>
<td></td>
</tr>
<tr>
<td>Boolean test if this Issue has been reopened after a close</td>
<td></td>
</tr>
<tr>
<td>The reopener Resource of this issue</td>
<td></td>
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<tr>
<td>The authenticated Agent that reopened this Issue</td>
<td></td>
</tr>
<tr>
<td>The last reopened date</td>
<td></td>
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<tr>
<td>The due date, if applicable</td>
<td></td>
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<tr>
<td>Boolean test if this issue is pending a response from the customer</td>
<td></td>
</tr>
<tr>
<td>Boolean test if this issue is blocked on other Issues</td>
<td></td>
</tr>
<tr>
<td>The blocking Issues, if this Issue is blocked on other Issues</td>
<td></td>
</tr>
<tr>
<td>Boolean test if this Issue is resolved</td>
<td></td>
</tr>
<tr>
<td>The resolver Resource of this Issue</td>
<td></td>
</tr>
<tr>
<td>The authenticated Agent that resolved this Issue</td>
<td></td>
</tr>
<tr>
<td>The resolved date. A resolved Issue is still open until it is closed</td>
<td></td>
</tr>
<tr>
<td>A type indicating the resolution; &quot;fixed,&quot; &quot;canceled&quot;, &quot;cannot reproduce&quot;, etc</td>
<td></td>
</tr>
<tr>
<td>Boolean test if this issue is closed. An issue may be left opened after being resolved for acknowledgement or review</td>
<td></td>
</tr>
<tr>
<td>The Resource of the closer</td>
<td></td>
</tr>
<tr>
<td>The authenticated Agent that closed the Issue</td>
<td></td>
</tr>
<tr>
<td>The closed date</td>
<td></td>
</tr>
<tr>
<td>Boolean test if this issue is assigned</td>
<td></td>
</tr>
<tr>
<td>The assigned Resource</td>
<td></td>
</tr>
<tr>
<td>The effective start date and end date of this Issue</td>
<td></td>
</tr>
<tr>
<td>The reason this Issue was closed, if applicable</td>
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**LogEntry**

Issues can have logs to provide a record of actions and comments.

Also known as:

- Read Operations for LogEntries:

  - Get LogEntries given unique Ids

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Get all the LogEntries in a system or Catalog

Query (Search) LogEntries based on attribute-based query terms or keywords

Register for notifications that LogEntries have been created or updated

Operations for LogEntry Issue Messaging:

Create, Update and Delete comments, as LogEntries, on an Issue

Delete comments for catalog, data range, Queues and Issues

Send a customer a message and records it in the issue log

Minimally Supported Attributes of LogEntries:

- A unique and permanent identifier
- The name of the LogEntry
- A description of the LogEntry
- The type of the LogEntry: state change, assignment change, comment
- The Agent associated with this LogEntry
- The Issue associated with this LogEntry
- The date of this LogEntry
- The Action of this LogEntry as defined in a controlled vocabulary
- The summary text header for this LogEntry
- The text message of this LogEntry

Queue

A Queue governs the constraints and processing of a set of Issues. All Issues belong to one Queue.

Also known as:

Read Operations for Queues:

Get Queues given unique Ids

Get all the Queues in a system or Catalog

Query (Search) Queues based on attribute-based query terms or keywords

Register for notifications that Queues have been created or updated
Write Operations for Queues:

- Create, Update and Delete Queues
- Add an alias Id to reference an existing Queue
- Organize Queues into Catalogs

Operations for resourcing Queues:

- Get the list of resources assigned in a given Queue
- Assign a Resource to a given Queue
- Unassign a Resource from a given Queue

Minimally Supported Attributes of Queues:

- A unique and permanent identifier
- The name of the Queue
- A description of the Queue
- The type of the Queue
- The provider of this Queue
- Any available branding for this Queue, for example an organizational logo or thumbnail
- Boolean indicator capable of suspending and resuming the Queue

Catalog

A directory or other kind of organization for learning objectives. Such a grouping serves to separate Queues managed by different organizations.

Also known as: FrontOffice

Read Operations for Catalogs:

- Get Catalogs given unique Ids
- Get all the Catalogs in a system or Catalog
- Query (Search) Catalogs based on attribute-based query terms or keywords
- Traverse Hierarchical relationships between Catalogs
- Register for notifications Catalogs have been created, updated or deleted

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Register for notifications that hierarchical relationships between Catalogs have been created, updated or deleted

Write Operations for Catalogs:

- Create, Update and Delete Catalogs
- Add an alias Id to reference an existing Catalog
- Manage Hierarchical relationships between Catalogs

Minimally Supported Attributes of Catalogs:

- A unique and permanent identifier.
- The name of the Catalog
- A description of the Catalog
- The type of the Catalog
- The provider of this Catalog
- Any available branding for this Catalog, for example, an organizational logo
- Any licensing (terms of usage) associated with this Catalog